

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

WETLAND CREATION, (ACRE)

Code 658

DEFINITION

A wetland that has been created on a site location, which historically was not a wetland or is a wetland but the site will be converted to a wetland with a different hydrology, vegetation type, or function than naturally occurred on the site.

PURPOSE

To create wetlands that have wetland hydrology, hydrophytic plant communities, hydric soil conditions, and wetland functions and/or values.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to sites where no natural wetland occurred or where a wetland exists, or existed, and the wetland characteristics (hydrology, vegetation, and functions) will be different from what historically occurred.

Upon completion of the practice, the site will meet the current NRCS definition of wetland, if hydric soils exist at the site.

This practice is applicable only if hydrologic conditions can be created by modifying drainage and/or artificial flooding of a duration and frequency to create and maintain wetland conditions during an average annual precipitation event. The wetland class/subclass will be specified.

If the presence of hazardous waste materials in the sediment or fill is suspected, soil samples will be collected and analyzed for the presence of hazardous waste as defined by local,

state, or federal authorities. Sites containing hazardous waste will not be created under this standard.

This practice does not apply to:

1. Constructed Wetland (656) intended to treat point and non-point sources of water pollution:
2. Wetland Enhancement (659) intended to rehabilitate a degraded wetland where specific functions and/or values are enhanced beyond original conditions; or
3. Wetland Restoration (657) intended to rehabilitate a degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to original conditions.

CRITERIA

General Criteria. The landowner shall obtain necessary local, state, and federal permits that apply before the practice is applied. Refer to Table 3 in practice standard Wetland Restoration (657) for further details concerning permit requirements.

Water rights are assured prior to practice application if required.

Establish vegetative buffers on surrounding uplands around the created wetlands to reduce the movement of sediment and soluble and sediment-attached substances carried by runoff. Use practice standard Filter Strip (393) to determine the minimum width of the vegetative buffer.

The soil, hydrology, and vegetative characteristics existing on the site and the

contributing watershed shall be documented before practice application begins.

Criteria for Wetland Hydrology. Hydrology should be available approximating the needs of the wetlands, and is defined as the rate, path, and timing of inflow and outflow; duration, frequency, and depth of flooding, ponding or saturation.

The standards and specifications for Dike (356) and Structure for Water Control (587) will be used as appropriate. Refer to the Engineering Field Handbook, Chapters 13, "Wetland Restoration, Enhancement, and Creation," and 6, "Structures," for additional design information. Existing drainage systems will be utilized, removed, or modified as needed to achieve the intended purpose.

Criteria for Hydrophytic Vegetation. Establish hydrophytic vegetation typical for the wetland type(s) being established.

In wetlands where supplemental vegetation is necessary, plantings will be done. Applicable guidelines can be found in Iowa Biology Technical Note #9, Designing Areas for Wildlife; Iowa Biology Job Sheet #3, Waterfowl Food Plants and Their Management; Tree Planting (612); Woodland Direct Seeding (652); Wildlife Wetland Habitat Management (644); Conservation Cover (327); and Engineering Field Handbook Chapter 13, Wetland Restoration, Enhancement, or Creation.

Plantings, seeding, or other types of vegetative establishment will be comprised of native species that occur on the wetland type being restored. Preference shall be given to plant materials collected within a 200 mile radius from the site or purchased from reliable plant sources.

Adequate substrate material and site preparation necessary for proper establishment of the selected plant species shall be included in the design.

If uplands are planned as part of a wetland creation, then native seedings should be used for these areas as well. Refer to Conservation Cover (327) for herbaceous restorations or Tree/Shrub Establishment (612), Woodland Direct Seeding (652) and Upland Wildlife Habitat Management (645) if trees and/or shrubs are desired.

Vegetative establishment should include a diverse range of plant species. Ensure that the approved seeding mixture does not include weed species and invasive species (e.g. Reed Canarygrass).

Criteria for Wetland Functions. Refer to practice standard Wetland Restoration (657) for Criteria for Wetland Functions.

DESIGN CRITERIA

Refer to practice standard Wetland Restoration (657) for Design Criteria.

CONSIDERATIONS

Refer to practice standard Wetland Restoration (657) for Considerations.

PLANS AND SPECIFICATIONS

Refer to practice standard Wetland Restoration (657) for Plans and Specifications.

OPERATION AND MAINTENANCE

Refer to practice standard Wetland Restoration (657) for Operation and Maintenance.